



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Bryan et al. PATENT NO. 6,001,130

SERIAL NO.: 10/017,611 GROUP ART UNIT: 3738

FILED: December 14, 2001 EXAMINER:

FOR: HUMAN SPINAL DISC PROSTHESIS WITH HINGES

ATTORNEY DOCKET NO.: 46739/268134

Commissioner for Patents  
Washington, D.C. 20231

REISSUE DECLARATION

Sir:

The undersigned, Vincent Bryan and Alex Kunzler, hereby declare as follows:

1. We are the named inventors of U.S. Letters Patent No. 6,001,130, entitled "Human Spinal Disc Prosthesis," which was granted on December 14, 1999, and our respective residences and countries of citizenship are provided below.
2. We verily believe ourselves to be the original, first and joint inventors of the invention described and claimed in U.S. Patent No. 6,001,130.

Reissue Application No. 10/017,611  
Filed: December 14, 2001  
REISSUE DECLARATION

3. We verily believe United States Letters Patent No. 6,001,130 to be partially inoperative or invalid by reason of our claiming less than we had a right to claim, and by reason of errors therein.

4. The errors in the original Letters Patent were discovered as a result of recent discussions between in-house counsel and outside counsel during reviews of assignee's patent portfolio.

5. During those discussions, it was discovered that claims 1-16, 19, and 20 of the patent contained limitations that were not necessary for the claims to be patentable over the art of record.

6. More particularly, during this review, it was discovered that claims 1, 16, and 19 recited limitations or elements that are not necessary for patentability over the art of record.

7. In claims 1 and 16, the limitation that the second leg is adapted for affixation to adjacent bone structure is not required for the claim to be patentable over the art of record.

8. In claim 19, the element "a plurality of said integral disc units" is not required for the claim to be patentable over the art of record.

9. In addition to claiming less than we had a right to claim, the claims contain errors that render them wholly or partially inoperative or invalid.

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10. More particularly, claims 1-20 each refer to a "vertebral disc," which does not exist, and should instead refer to an "intervertebral disc."

11. The incorrect terms "vertebral disc" or "intravertebral disc" also appear at various points in the specification, which are amended to recite an "intervertebral disc" in the attached Preliminary Amendment.

12. The aforementioned defects in the claims arose during the prosecution of the application that resulted in the original Letters Patent because of the applicants' and attorney's failure to appreciate the full scope of the invention. More specifically, it was believed that the limitations to the claims described above in paragraphs 7 and 8 were necessary to completely recite the endoprosthesis, and it was not appreciated that claims to an endoprosthesis without provision for attachment to the vertebral bodies, or without a plurality of disc units, would be patentable.

13. The errors in the claims were discovered during a recent review of the patent portfolio of the assignee, which resulted in a reassessment of the scope of the claims in the patent, and the realization that claims should have been sought that recited the novel and nonobvious features of the invention, and did not recite features that were unnecessary to patentability.

14. After becoming aware of the aforementioned errors, a detailed review of the prosecution history of the original application was undertaken to ascertain how the errors occurred, and the present application for reissue of United States Letters Patent 6,001,130 was promptly prepared.

Reissue Application No. 10/017,611  
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Amendments to claims 1, 16, and 19 were prepared in the form of the accompanying Preliminary Amendment to correct the above defects and errors, and to render the claims more readable, and additional dependent claims 21 and 22 were added to provide more comprehensive claim coverage.

15. This application for Letters Patent addresses the aforementioned defects in the claims and specification. These errors arose through inadvertence, and without any deceptive intention on our part.

16. We verily believe ourselves to be the first, original and joint inventors of the subject matter that is claimed in this application for reissue and for which reissue of the original Letters Patent on the invention entitled "Human Spinal Disc Endoprosthesis With Hinges" is sought, and do not believe that the invention was ever known or used before our invention thereof was made.

17. We have reviewed and understand the contents of the specification, including the claims as presented in the accompanying application for reissue.

18. We acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §§ 1.56(a).

19. We offer to surrender U.S. Letters Patent No. 6,001,130, conditioned upon the reissue of said Letters Patent.

Reissue Application No. 10/017,611

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REISSUE DECLARATION

20. We hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Reissue Application No. 10/017,611

Filed: December 14, 2001

REISSUE DECLARATION

Full name of sole or first inventor Vincent Bryan

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence 4624 East Mercer Way, Mercer Island, WA 98040

Citizenship USA

Post Office Address Same as above

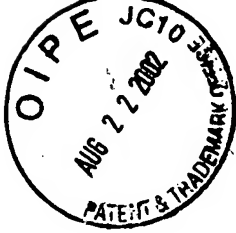
Full name of second inventor Alex Kunzler

Inventor's signature  Date 8.12.02

Residence 22748 SE 43<sup>rd</sup> Ct., Issaquah, WA 98029

Citizenship USA

Post Office Address Same as above



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5. During those discussions, it was discovered that claims 1-16, 19, and 20 of the patent contained limitations that were not necessary for the claims to be patentable over the art of record.
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REISSUE DECLARATION

Full name of sole or first inventor Vincent Bryan

Inventor's signature

Date 8/12/02

Residence 4624 East Mercer Way, Mercer Island, WA 98040

Citizenship USA

Post Office Address Same as above

Full name of second inventor Alex Kunzler

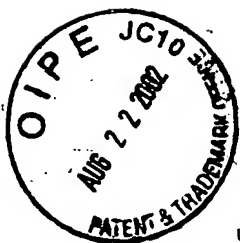
Inventor's signature

Date

Residence 22748 SE 43<sup>rd</sup> Ct., Issaquah, WA 98029

Citizenship USA

Post Office Address Same as above



PTO/SB/53 (02-01)  
Approved for use through 01/31/2004. OMB 0651-0033  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>REISSUE APPLICATION: CONSENT OF ASSIGNEE; STATEMENT OF NON-ASSIGNMENT</b>		Docket Number (Optional) 46739/268134
This is part of the application for a reissue patent based on the original patent identified below.		
Name of Patentee(s) Spinal Dynamics Corporation		
Patent Number 6,001,130	Date Patent Issued December 14, 1999	
Title of Invention Human Spinal Disc Prosthesis with Hinges		
<p>1. <input checked="" type="checkbox"/> Filed herein is a certificate under 37 CFR 3.73(b). (Form PTO/SB/96)</p> <p>2. <input type="checkbox"/> Ownership of the patent is in the inventor(s), and no assignment of the patent has been made.</p> <p>One of boxes 1 or 2 above must be checked. If multiple assignees, complete this form for each assignee. If box 2 is checked, skip the next entry and go directly to "Name of Assignee".</p> <p>The written consent of all assignees and inventors owning an undivided interest in the original patent is included in this application for reissue.</p>		
The assignee owning the entire right, title and interest in said original patent is Spinal Dynamics Corporation and the assignee consents to Reissue Application No. 10/017,611.		
Name of assignee Spinal Dynamics Corporation		
Signature <i>Earl D. Douglas</i>	Date 8-15-02	
Typed or printed name and title of person signing for assignee (if assigned) Earl M. Douglas, Vice President and General Counsel		

Burden Hour Statement: This form is estimated to take 0.1 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**STATEMENT UNDER 37 CFR 3.73(b)**Applicant/Patent Owner: Spinal Dynamics CorporationApplication No./Patent No.: 6,001,130Filed/Issue Date: December 14, 1999Entitled: Human Spinal Disc Prosthesis with HingesSpinal Dynamics Corporation, a corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either:

- A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_

To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_

To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

3. From: \_\_\_\_\_

To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

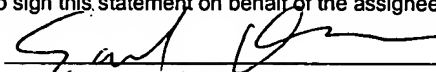
- ☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.8]

The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of the assignee.

8-15-02

Date



Signature

Earl M. Douglas

Typed or printed name

Vice President and General Counsel

Title

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

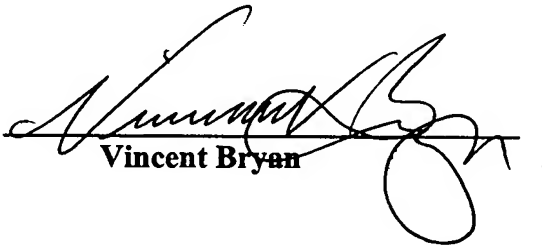
**ASSIGNMENT**

WHEREAS, we, **Vincent Bryan and Alex Kunzler** have invented certain improvements disclosed and claimed in United States Patent Number 6,001,130 entitled **HUMAN SPINAL DISC PROSTHESIS WITH HINGES**; and

WHEREAS, **Spinal Dynamics Corporation**, a Washington corporation having a place of business at 9655 SE 36" Street, Suite 110, Mercer Island, WA 98040-3732, desires to establish its ownership of all rights relating to this invention and patent;


NOW, THEREFORE, in consideration of the sum of Five Dollars (\$5.00) and other good and valuable consideration paid by said **Spinal Dynamics Corporation**, the receipt and sufficiency of which are hereby acknowledged, we have sold, assigned, transferred and conveyed and by these presents do hereby sell, assign, transfer and convey unto **Spinal Dynamics Corporation**, in and for the United States and its territories and for foreign countries, the entire right, title and interest in and to said patent, in and to the invention therein set forth, including any reissue, renewal, division, or continuation, in whole, or in part thereof, and we hereby bind ourselves, our heirs, legal representatives, administrators and assigns properly to execute without further consideration, any and all applications, petitions, oaths and assignments or other papers and instruments which may be necessary in order to carry into full force and effect the sale, assignment, transfer and conveyance hereby made or intended to be made.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this <sup>th</sup> 18 day of August, 2002.

  
Vincent Bryan

State of Washington }  
                                  }  
County of King        }

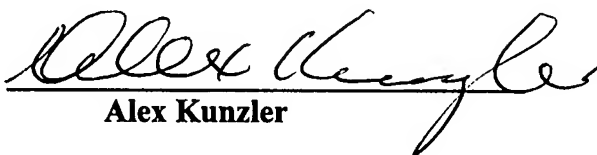
Then personally appeared the above named Vincent Bryan who acknowledged the foregoing instrument to be his free act and deed, before me, this 12 day of August, 2002.

  
Notary Public

*my Commission Expires April 09, 2006*

U.S. Patent No. 6,001,130  
Inventors: Vincent Bryan and Alex Kunzler  
"Human Spinal Disc Prosthesis With Hinges"  
Issued: December 14, 1999  
ASSIGNMENT OF RIGHTS OF PATENT

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 14 day of August,  
2002.

  
Alex Kunzler

State of Washington }  
                                  }  
County of King        }

Then personally appeared the above named Alex Kunzler who acknowledged the foregoing  
instrument to be his free act and deed, before me, this 14 day of August, 2002.

  
Notary Public  
My Commission expires April 09, 2006